

PPP2R1A Blocking Peptide(C-term)

Synthetic peptide Catalog # BP19717b

Specification

PPP2R1A Blocking Peptide(C-term) - Product Information

Primary Accession <u>P30153</u>

Other Accession <u>P54612</u>, <u>Q76MZ3</u>, <u>Q32PI5</u>, <u>NP_055040.2</u>

PPP2R1A Blocking Peptide(C-term) - Additional Information

Gene ID 5518

Other Names

Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform, Medium tumor antigen-associated 61 kDa protein, PP2A subunit A isoform PR65-alpha, PP2A subunit A isoform R1-alpha, PP2R1A

Target/Specificity

The synthetic peptide sequence is selected from aa 469-481 of HUMAN PPP2R1A

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PPP2R1A Blocking Peptide(C-term) - Protein Information

Name PPP2R1A

Function

The PR65 subunit of protein phosphatase 2A serves as a scaffolding molecule to coordinate the assembly of the catalytic subunit and a variable regulatory B subunit. Upon interaction with GNA12 promotes dephosphorylation of microtubule associated protein TAU/MAPT (PubMed:15525651). Required for proper chromosome segregation and for centromeric localization of SGO1 in mitosis (PubMed:16580887). Together with RACK1 adapter, mediates dephosphorylation of AKT1 at 'Ser-473', preventing AKT1 activation and AKT-mTOR signaling pathway (By similarity). Dephosphorylation of AKT1 is essential for regulatory T-cells (Treg) homeostasis and stability (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q32PI5}. Nucleus. Chromosome, centromere. Lateral cell



membrane. Cell projection, dendrite. Note=Centromeric localization requires the presence of BUB1.

PPP2R1A Blocking Peptide(C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

PPP2R1A Blocking Peptide(C-term) - Images

PPP2R1A Blocking Peptide(C-term) - Background

This gene encodes a constant regulatory subunit of protein phosphatase 2. Protein phosphatase 2 is one of the four major Ser/Thr phosphatases, and it is implicated in the negative control of cell growth and division. It consists of a common heteromeric core enzyme, which is composed of a catalytic subunit and a constant regulatory subunit, that associates with a variety of regulatory subunits. The constant regulatory subunit A serves as a scaffolding molecule to coordinate the assembly of the catalytic subunit and a variable regulatory B subunit. This gene encodes an alpha isoform of the constant regulatory subunit A. Alternatively spliced transcript variants have been described. [provided by RefSeq].

PPP2R1A Blocking Peptide(C-term) - References

Jones, S., et al. Science 330(6001):228-231(2010) Schmitz, M.H., et al. Nat. Cell Biol. 12(9):886-893(2010) Heikkinen, P.T., et al. J. Biol. Chem. 285(6):3740-3749(2010) Dupont, W.D., et al. Cancer 116(1):8-19(2010) Wang, Q., et al. Neoplasia 11(10):1012-1021(2009)